REMARKS

Claims 1-4, 8, 9, 11-17, and 20-29 are pending, including independent claims 1, 8, 13, 17, 22 and 26. All claims were again rejected on the basis of prior art, but Applicants believe the Examiner's rejections are incorrect.

Claims 13-14 were rejected under 35 U.S.C. § 102(b) as anticipated by Romesburg, particularly the embodiment shown in Fig. 5. Applicants disagree. Claim 13 is directed to the embodiment shown in Fig. 8 of the present application and recites, *inter alia*, that a first adaptive signal processor receives "an error signal" as one input; a second adaptive signal processor receives "said error signal" (i.e., the same error signal received by the first signal processor) as one input; the two signal processors provide output signals to the same subtracter which in turn outputs "said error signal;" and the signal processors operate to minimize the power of "said error signal." These features simply are not shown in Fig. 5 of Romesburg. Specifically, filters 50 and 52 receive *different* error signals E_1 and E_2, not the same error signal; the filters 50 and 52 provide outputs to *different* adders 24 and 38 that produce the two error signals, not the same subtracter; and adder 46 (which does receive outputs from the two filters) produces no error signal that is supplied to the filters. Therefore, claim 13 clearly is not anticipated by Romesburg.

Dependent claim 14 is not anticipated for the same reason. In addition, and contrary to the Examiner's assertion, Fig. 5 of Romesburg does *not* show a microphone disposed almost directly above the face of a speaker as claimed. First, there is no indication, and the Examiner cannot infer, that the conceptual diagram of Fig. 5 is drawn realistically to scale. Second, the Figure itself plainly does not show microphone 22 positioned "almost directly above" the speaker's face, but rather spaced significantly *away from* and not above the speaker's face.

Claims 1-2, 8-9, 11-12, 21-23 and 27 were rejected under 35 U.S.C. § 103(a) as obvious over Sasaki in view of Walters. Claim 1 recites, inter alia, that the two microphones are positioned in front of and above the position of the speaker's mouth by approximately the same distance, and that the orientation of one microphone with respect to the vocalizing direction is approximately 0° while the orientation of the second microphone with respect to the vocalizing direction is approximately 45°. As explained

in the application, Applicants have determined through experimentation that this configuration is particularly beneficial to obtain an improved average SN ratio (see, e.g., Figs. 3(a), 4; page 11, lines 9-21; page 12, lines 13-31). Nothing in Sasaki describes or suggests this particular beneficial configuration.

Walters also does not suggest Applicants' claimed configuration. Walters describes the use of three microphones 2, 3, and 4 that are positioned on rod 8 of a sun visor. All microphones are shown as having the *same* orientation with respect to the speaker's vocalizing direction (see Fig. 1). Even if the sun visor is rotated as the Examiner suggests, there is no suggestion in Walters that the orientations of the microphones change with respect to one another or the vocalizing direction. Further, Walters certainly does not suggest the specific favorable configuration discovered by Applicants (including different microphone orientations at approximately 0° and 45° relative to the vocalizing direction).

Applicants also note the Examiner's conclusion that it would have been obvious to combine Sasaki and Walters "to provide the supporting member traverses an angular range, within which the main reception direction of the microphones intersects the sun visor, with a snap-type movement during pivoting of the sun visor." This statement is not understandable and, in any event, is nothing like the recited invention in claim 1.

Claim 8 is directed to a variation of the first embodiment and recites, *inter alia*, that two directional microphones are spaced apart approximately 9 cm, and the orientation of one microphone with respect to the vocalizing direction is approximately 0° while the orientation of the second microphone with respect to the vocalizing direction is approximately 60°. Claim 8 also has been amended to recite (as in claim 1) that the microphones are positioned in front of and above the position of the speaker's mouth by approximately the same distance. As explained in the application, Applicants have determined through experimentation that this configuration is particularly beneficial to obtain an improved average SN ratio (see, e.g., Figs. 3(a), 5; page 11, lines 9-18, 22-24; page 12, lines 13-25; page 13, lines 1-8).

Neither Sasaki nor Walters describes or suggests this particular beneficial configuration. As also explained further above in connection with claim 1, and contrary to the Examiner's assertions, Walters does not at all describe or suggest a specific

spacing between microphones of approximately 9 cm, or different microphone orientations at approximately 0° and 60° relative to the vocalizing direction. *No* spacing dimensions are provided in Walters, and all microphones in Walters appear to be fixed with respect to one another in the *same* orientation relative to the vocalizing direction.

Claim 22 is directed to a variation of the first embodiment and recites, inter alia, that two directional microphones are oriented substantially perpendicularly to the speaker's vocalizing direction and are spaced apart approximately 7.5 cm. Claim 22 also has been amended to recite that the microphones are positioned above and to one side of the position of the speaker's mouth by approximately the same distance, and are spaced apart from one another in the vocalizing direction. As explained in the application, Applicants have determined though experimentation that this configuration is particularly beneficial to obtain an improved average SN rate (see, e.g., Figs. 3(b), 6; page 11, line 25 to page 12, line 5, lines 13-25; page 13, lines 9-15).

As in the case of claims 1 and 8 discussed above, neither Sasaki nor Walters describes or suggests this particular beneficial configuration, specifically including two directional microphones oriented substantially *perpendicularly* to the vocalizing direction, at approximately the *same distance above and to one side* of the speaker's mouth, and spaced apart *approximately 7.5 cm in the vocalizing direction*. In particular, Walters provides no spacing dimensions for his microphones; his microphones all appear to be oriented in the vocalizing direction (not perpendicularly thereto); and his microphones are not positioned at about the same distance above *and to one side* of the speaker's mouth.

Claims 15-17 were rejected under 35 U.S.C. § 103(a) as obvious over Romesburg as applied to claim 13 in view of Lange. Applicants disagree. Romesburg is not applicable to claims 13 and 14 as explained above. Moreover, Lange does not show or suggest one microphone "disposed almost directly above the face of a speaker" (claims 14-16) or that another microphone is specifically spaced apart from that first microphone on the occipital side by about 1 to 5 cm (claim 16). In fact, Applicants do not see *any* specific placement distance identified in Lange.

Claim 17 similarly recites that, inter alia, "one microphone is disposed substantially directly above the face of a speaker and the other microphone is spaced

apart on the occipital side by about 1 to 5 cm from the position of the one microphone." As explained above for claims 14-16, this specific configuration is not described in or suggested by any combination of Romesburg and Lange.

Claims 3-4 and 24-25 were rejected under 35 U.S.C. § 103(a) as obvious over Sasaki and Walters, as applied to claim 1, and further in view of Romesburg. For the reasons discussed above in connection with claim 1, Applicants believe these dependent claims also are not affected by the cited art.

Claim 20 was rejected under 35 U.S.C. § 103(a) as obvious over Romesburg and Lange, as applied to claim 17, and further in view of Yoshida. For the reasons discussed above in connection with claim 17, Applicants believe dependent claim 20 also is not affected by the cited art. In addition, the passage in Lange that is cited by the Examiner (col. 8, line 30 to col. 9, line 6) relates to a power-monitoring circuit in Fig. 5. Applicants do not see any relation between the cited passage and the subject matter of claim 20.

Claim 26 was rejected under 35 U.S.C. § 103(a) as obvious over Sasaki. Applicants disagree. This claim is directed to a variation of Applicants' invention and recites, inter alia, that one directional microphone is oriented substantially perpendicularly to the vocalizing direction, the other directional microphone is oriented at an acute angle relative to the orientation of the first microphone, and the two microphones are spaced apart by about 2 cm. Claim 26 also has been amended to recite that the microphones are positioned above and to one side of the position of the speaker's mouth by approximately the same distance, and are spaced apart from one another in the vocalizing direction. As explained in the application, Applicants have determined through experimentation that this configuration is particularly beneficial to obtain an improved average SN ratio (see, e.g., Figs. 3(b), 7; page 11, line 25 to page 12, line 2, lines 6-11 and 13-25; page 13, lines 16-24).

Sasaki does not describe or suggest this particular beneficial configuration. In particular, the cited passages of Sasaki do *not* describe or suggest orienting a directional microphone substantially perpendicularly to a vocalizing direction, orienting a second microphone at an acute angle relative to the orientation of that first microphone, positioning both microphones above and to one side of the position of the speaker's

mouth by approximately the same distance, and spacing apart the two microphones in the vocalizing direction by about 2 cm specifically.

Dependent claims 28 and 29 were rejected under 35 U.S.C. § 103(a) as obvious over Sasaki in view of Romesburg. For the reasons stated above in connection with independent claim 26, Applicants believe these dependent claims are patentable over Sasaki, and Romesburg does not cure the deficiencies of Sasaki.

In conclusion, Applicants submit that the claims, as amended herein, patentably distinguish over the cited art. Therefore, Applicants respectfully request reconsideration and expedited allowance of this application.

Respectfully submitted,

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